

STATEMENT OF BASIS

To: Reviewers
Through: Michael Stoll, Operating Permit Program Manager 
From: Melissa Meares, Air Quality Engineer 
Subject: Draft Operating Permit 3-1-185, Wyoming Medical Center
Date: November 13, 2007

Introduction:

Attached is the draft Wyoming Air Quality Standards and Regulations (WAQSR) Chapter 6, Section 3 renewal operating permit for the Wyoming Medical Center, as required by WAQSR Ch 4, Sec 5. Sources of air pollution at the hospital include a 500 lb/hr Hospital/Medical/Infectious Waste Incinerator (HMIWI), two 20.9 MMBtu/hr dual fuel-fired boilers (natural gas and no. 2 fuel oil), and two diesel-fired 1,070 hp emergency generators.

Permitting History:

MD-645 (6/26/01): was issued to address the two 20.9 MMBtu/hr dual fuel-fired boilers that were constructed in 1992. Applicable requirements include NO_x and CO emission limits for the two boilers. The boilers are limited to 500 hour per year of fuel oil combustion, with a fuel oil sulfur content limit of 0.5%. Additionally, NO_x and particulate limits are set while burning fuel oil. The boilers are subject to the requirements of 40 CFR 60 Subpart Dc.

Applicable Requirements:

Applicable requirements include the conditions from the permit listed above and the WAQSR Ch 3, Sec 2 visible emission limits. The HMIWI is subject to the emission limits, operator training and qualification, testing, monitoring, recordkeeping and reporting requirements of Ch 4, Sec 5.

Periodic Monitoring:

Periodic monitoring for visible emissions from the two boilers consists of monitoring the type of fuel burned. The permittee shall also monitor operating hours when combusting fuel oil and sulfur content of the fuel oil for particulate emissions and sulfur content limits, respectively. For NO_x emissions, the permittee shall operate and maintain the boilers according to manufacturer's recommendations.

Periodic monitoring for visible emissions from the HMIWI consists of conducting annual visible emission observations. The permittee is required to measure PM, CO, and HCl emissions annually, or according to a reduced monitoring schedule specified in WAQSR Ch 4, Sec 5. For all pollutants, the permittee shall monitor various operating parameters including the charge rate to the incinerator, secondary chamber temperature, outlet temperature from the wet scrubber, scrubber liquor flow rate, scrubber liquor pH, and pressure drop across the scrubber. The permittee shall also monitor the date, time, and duration for use of the bypass stack. Any calendar day(s) for which data on emission rates or operating parameters were not obtained, were incorrect from system malfunction, or exceeded the applicable limits shall also be identified.

Changes from the Current Operating Permit:

Boiler B-03 has been permanently decommissioned. The General Conditions are updated to reflect re-numbering and include current wording and conditions. The stratospheric ozone protection requirements have been moved to the General Conditions.

